



216011US-3

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: :
YOSHINOBU TAKANO ET AL. : GROUP: 2874
SERIAL NO: 09/987,551 : EXAMINER: S. KNAUSS
FILED: NOVEMBER 15, 2001 :
FOR: BRANCHING METHOD FOR :
AN OPTICAL FIBER CABLE :

REQUEST FOR RECONSIDERATION

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

In response to the Office Action dated January 3, 2003, please consider the following remarks in the above-identified application.

Claims 1-20 are currently pending in the application.

In the outstanding Office Action, Claims 1, 3-7, 9-13, and 15-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication No. 2-278206 to Tanji et al. (hereafter Tanji). Claims 1, 2, 7, 8, 13, 14, and 18-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication No. 1-310305 to Aizawa et al. (hereafter Aizawa). Applicants respectfully traverse the rejections of the claims for the reasons discussed in detail below.

The present invention is directed to a branching method for an optical fiber cable, an optical fiber cable, and an optical closure for connecting a terminal of a branch side optical fiber. As recited in each of independent Claims 1, 18, and 19, the

fiber cable contains a plurality of plastic optical fibers. Examples of advantages of such a method, cable, and closure are discussed throughout the specification.

Regarding the rejection of independent Claim 1, 18, and 19 in view of Tanji, Applicants respectfully assert, and the Office Action explicitly concedes, that Tanji does not teach the claimed features of an optical fiber cable containing plastic fibers.¹ Specifically, independent Claims 1, 18, and 19 each recite an “optical fiber cable containing a plurality of plastic optical fibers.”

However, the Office Action asserts that “such cables are known in the art, and it would have been obvious to branch cables having different types of fibers within. Furthermore, it would be desirable to be able to branch a plastic optical fiber cable in a short distance fiber link[]. Therefore, it would have been obvious to one of ordinary skill in the art to use the method of Tanji to form a post-branching connection to a plastic optical fiber cable.”² (Underlining added). Applicants respectfully traverse these assertions for the reasons discussed in detail below.

The originally filed disclosure states advantages of plastic optical fibers as compared to glass fibers. Examples of advantages include that because the plastic optical fibers are flexible, have a large allowable extensional strain, and can be easily cut, a degree of freedom in providing a branch increases, and a wiring design in a building can easily be made,³ an optical closure can be made substantially small-sized,⁴ and the branching operation can be simplified.⁵

As stated in MPEP § 2143.01, “[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found

¹ Page 3, line 4; page 4, line 14; and page 5, line 13, of the outstanding Office Action.

² Page 3, lines 5-9; page 4, lines 15-19; and page 5, lines 14-20, of the outstanding Office Action.

³ Please see, for example, from page 6, line 26 to page 7, line 10, of the originally filed specification.

⁴ Please see, for example, from page 7, line 13 to page 8, line 9, of the originally filed specification.

⁵ Please see, for example, page 4, lines 5-19, of the originally filed specification.

either explicitly or implicitly in the references themselves.” (Underlining added). In this case, Applicants respectfully assert that the Office Action has not provided any required teaching, suggestion, or motivation in Tanji to include the claimed features of an optical fiber cable containing a plurality of plastic optical fibers, as recited in independent Claim 1, 18, and 19. Rather, Applicants respectfully assert that the only motivation for modifying Tanji to include the claimed features of an optical fiber cable containing a plurality of plastic optical fibers is provided by Applicants’ disclosure.

Thus, Applicants respectfully submit that the above-rejection of independent Claims 1, 18, and 19 in view of Tanji is based on the improper application of hindsight considerations. It is well settled that it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using Applicants’ structure as a template and selecting elements from the references to fill in the gaps.⁶ Recognizing, after the fact, that a modification of the prior art would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a conclusion of obviousness, is an indication of improper application of hindsight considerations. (Underlining added). Simplicity and hindsight are not proper criteria for resolving obviousness.⁷ Further, Applicant respectfully submits that the “fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness.”⁸ Therefore, Applicant respectfully asserts that an improper “obvious to try” rationale is being applied in the Office Action.⁹ Because Tanji does not teach or suggest the desirability of the claimed features of an optical fiber cable containing a plurality of plastic optical fibers, Applicants respectfully assert that the Office Action

⁶ *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

⁷ *In re Warner*, 397 F.2d 1011, 154 USPQ 173 (CCPA 1967).

⁸ See Heading under MPEP 2143.01.

⁹ See MPEP 2145 X.B.

has failed to establish a *prima facie* case of obviousness, and Applicants respectfully submit that the rejection of independent Claims 1, 18, and 19 under 35 U.S.C. § 103(a) is improper. Thus, for at least these reasons, Applicants respectfully request that the rejection of independent Claims 1, 18, and 19 under 35 U.S.C. § 103(a) in view of Tanji be withdrawn.

Regarding the rejection of independent Claim 1, 18, and 19 in view of Aizawa, Applicants respectfully assert, and the Office Action explicitly concedes, that Aizawa also does not teach the claimed features of an optical fiber cable containing plastic fibers.¹⁰

However, the Office Action asserts that “such cables are known in the art, and it would have been obvious to branch cables having different types of fibers within. Furthermore, it would be desirable to be able to branch a plastic optical fiber cable in a short distance fiber link. Therefore, it would have been obvious to one of ordinary skill in the art to use the method of Tanji [sic] to form a post-branching connection to a plastic optical fiber cable.”¹¹ (Underlining added). Applicants respectfully traverse these assertions for the reasons discussed in detail below.

For reasons similar to those stated above with reference to Tanji, Applicants respectfully assert that the Office Action has not provided any required teaching, suggestion, or motivation in Aizawa to include the claimed features of an optical fiber cable containing a plurality of plastic optical fibers, as recited in independent Claim 1, 18, and 19. Rather, Applicants respectfully assert that the only motivation for modifying Aizawa to include the claimed features of an optical fiber cable containing a plurality of plastic optical fibers is provided by Applicants’ disclosure.

¹⁰ Page 6, line 11; and page 7, line 6, of the outstanding Office Action.

¹¹ Page 6, lines 12-16; and page 7, lines 6-11, of the outstanding Office Action.

Thus, for reasons similar to those stated above with reference to Tanji, Applicants respectfully submit that the rejection of independent Claims 1, 18, and 19 in view of Aizawa is based on the improper application of hindsight considerations, as Aizawa does not teach or suggest the desirability of the claimed features of an optical fiber cable containing a plurality of plastic optical fibers. Therefore, Applicants respectfully assert that the Office Action has failed to establish a *prima facie* case of obviousness, and Applicants respectfully submit that the rejection of independent Claims 1, 18, and 19 under 35 U.S.C. § 103(a) is improper. Thus, for at least these reasons, Applicants respectfully request that the rejection of independent Claims 1, 18, and 19 under 35 U.S.C. § 103(a) in view of Aizawa be withdrawn.

Applicants respectfully request, in view of all of the outstanding grounds of rejection of independent Claims 1, 18, and 19 having been overcome for at least the reasons discussed in detail above, the allowance of the independent claims.

Dependent Claims 2-17 and 20 depend from independent Claims 1 and 19, respectively, and are therefore also allowable for at least the same reasons as the independent claims, as well as for their own features. Thus, for at least these reasons, Applicants respectfully request that the rejections of dependent Claims 2-17 and 20 under 35 U.S.C. § 103(a) be withdrawn and the dependent claims allowed.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-20 is earnestly solicited.

Finally, the attention of the Patent Office is directed to the change of address of Applicants' representative, effective January 6, 2003:

Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

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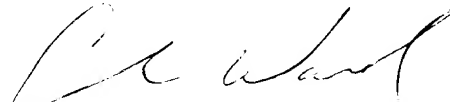
Alexandria, VA 22314.

Please direct all future communications to this new address.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND
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